

**ABSTRACT OF THE DISCLOSURE**

**[0085]** A liquid cooling system and apparatus is presented. A two-piece embodiment is presented. The first component is a heat transfer unit capable of engaging a processor and adapted to transfer heat from the processor to a liquid thereby generating heated liquid. The heated liquid is transported through a detachable input and output transport conduit to a second component. The second component is a heat exchange unit capable of cooling the liquid transported from the heat transfer unit. The heat exchange unit includes an input cavity for receiving the heated liquid, a heat dissipater for dissipating heat from the heated liquid thereby producing cooled liquid, and an output cavity for outputting the cooled liquid back to the heat transfer unit. In one embodiment, the heat exchange unit includes a pumping system for pumping the liquid from the heat exchange unit through the conduit to the heat transfer unit and back.